

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A scheduler device ~~(2)~~ for scheduling the transmission of data from a plurality of queues ~~(B₁, B₂, B₃)~~ in a source node ~~(1)~~ to a plurality of destination nodes ~~(N₁, N₂, N₃)~~ via a plurality of outlet ports ~~(P₁, P₂, P₃, P₄)~~ from said source node ~~(1)~~, each of said outlet ports ~~(P₁, P₂, P₃, P₄)~~ being associated with a resource among a plurality of resources ~~(OR₁, OR₂, OR₃, OR₄)~~, the data being transmitted via said resource to at least one of said plurality of destination nodes ~~node (N₁, N₂, N₃)~~, each of said plurality of destination nodes receiving data from all or some of said plurality of resources ~~(OR₁, OR₂, OR₃, OR₄)~~, said scheduler device ~~(2)~~ being characterized in that it has comprising:

a plurality of servers ~~(S₁, S₂, S₃, S₄)~~,

each of said plurality of servers being associated with a respective one of the ~~resources of~~ said plurality of resources ~~(OR₁, OR₂, OR₃, OR₄)~~ and

each of said servers including comprising a scheduler module which is means, said scheduler means being independent for each of said servers.

2. (currently amended): A scheduler device ~~(2)~~ according to claim 1, ~~characterized in that wherein~~ said scheduler ~~means-module~~ ~~comprise-comprises~~ a plurality of stages (~~L_1, L_2, L_3~~) corresponding respectively to a plurality of scheduling schemes using different criteria.

3. (currently amended): A scheduler device ~~(2)~~ according to claim 1, ~~characterized in that wherein~~ said scheduling ~~means-module~~ ~~comprise-comprises~~ a cyclical scheduling module ~~means~~ of the round robin type.

4. (currently amended): A scheduler device ~~(2)~~ according to claim 1, ~~characterized in that wherein~~ said scheduling ~~means-module~~ ~~comprise-comprises~~ a weighted fair queuing (WFR) scheduling -module ~~means~~.

5. (currently amended): A scheduler device ~~(2)~~ according to claim 1, ~~characterized in that wherein~~ said scheduling ~~means-module~~ ~~is are~~ dependent on a set of static and/or dynamic weights.

6. (currently amended): A scheduler device ~~(2)~~ according to claim 1, ~~characterized in that wherein~~ said scheduler ~~means-module~~ ~~is are~~ dependent on a first set of weights, each of

said weights representing the percentage of said resource allocated to each of said nodes of said plurality of nodes.

7. (currently amended): A scheduler device ~~(2)~~ according to claim 5, ~~characterized in that wherein~~ said scheduler means module depend depends on a second set of weights, each of said weights representing the relative weight of the traffic of each of said nodes relative to the total traffic of the plurality of said nodes.

8. (currently amended): A node ~~(1)~~ including comprising a scheduler device ~~(2)~~ according to claim 1, the node comprising a plurality of queues ~~(B₁, B₂, B₃)~~ for sending data to a plurality of destination nodes ~~(N₁, N₂, N₃)~~, and a plurality of outlet ports ~~(P₁, P₂, P₃, P₄)~~.

9. (currently amended): A data transmission system ~~(10)~~ including comprising at least one source node ~~(1)~~ according to claim 1.